

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau(43) International Publication Date  
21 May 2004 (21.05.2004)

PCT

(10) International Publication Number  
**WO 2004/042395 A1**(51) International Patent Classification<sup>7</sup>: G01N 33/50(21) International Application Number:  
PCT/GB2003/004749(22) International Filing Date:  
5 November 2003 (05.11.2003)

(25) Filing Language: English

(26) Publication Language: English

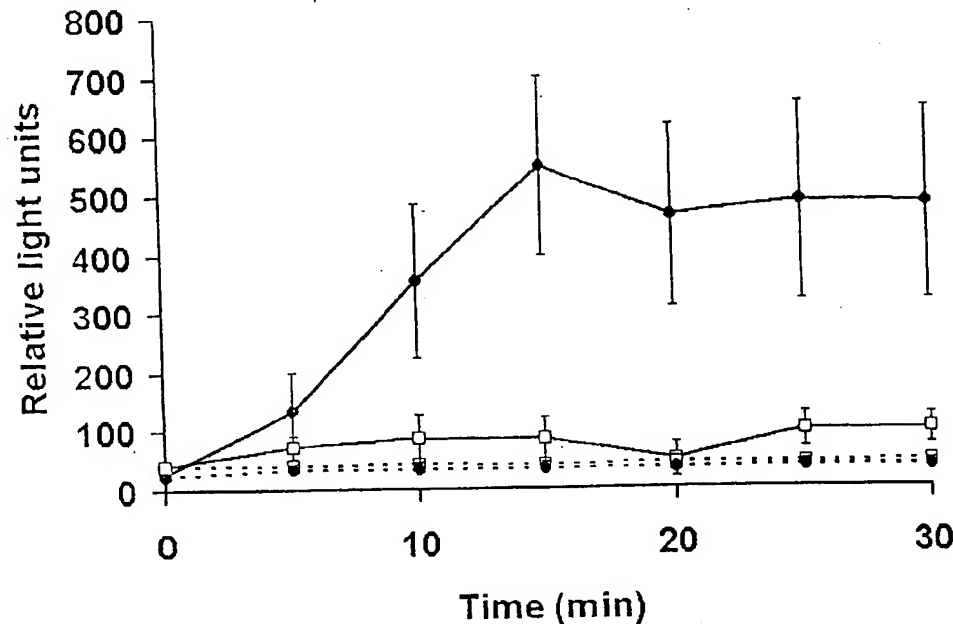
(30) Priority Data:  
0225885.3 6 November 2002 (06.11.2002) GB(71) Applicant (for all designated States except US): ISIS IN-  
NOVATION LIMITED [GB/GB]; Ewert House, Ewert  
Place, Summertown, Oxford OX2 7SG (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MIAN, Rubina  
[GB/GB]; Department of Physiology, School of Scienceand Environment, Coventry University, Cox Street, Ox-  
ford CV1 5FB (GB). MACDONALD, David, Whyte  
[GB/GB]; Department of Zoology, University of Oxford,  
South Parks Road, Oxford OX1 3PS (GB).(74) Agents: IRVINE, Jonquil, Claire et al.; J.A. Kemp & Co.,  
14 South Square, Gray's Inn, London WC1R 5JJ (GB).(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR,  
CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,  
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,  
SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,  
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.(84) Designated States (regional): ARIPO patent (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: QUANTIFYING EXPOSURE TO STRESS

(57) Abstract: The present invention provides an *in vitro* method for quantifying exposure to psychological stress which relies on measuring the retained ability of neutrophils, preferably neutrophils in a whole blood sample, to exhibit challenge-induced superoxide anion production. Using such methodology, coping capacity of individuals for particular psychological stressors may be assessed.

WO 2004/042395 A1